Globus User's Guide and Programmer's Guide:

1. User's guide tells you about the software and tools needed and how to install, configure and verify these.

2. Programmer's guide goes through the details of designing a service and implementing it.

    a. Provide service interface
    b. Generate Grid service support code
    c. Implement the service
    d. Deploy the service

More Details:

a. Provide service interface:
Two approaches:
    interface in Java → generate WSDL interface
    WSDL portType interface→ generate SOAP binding (Define it in gwsdl)
    (PortType is an element defined in WSDL that defines a set of operation and the messages needed for the operations).

b. Generate Grid Service Support Code:

--All the tools for stub and support code generation are centered around generateWSDL and generateStubs.

--Ant task and xml batch files are provided to generate the required stub and code for hosting the service as an OGSI compliant Grid Service.

Bottom up:
--used when the service is available as legacy code in Java and we want to grid enable it.
Top down:
-- Used when service is in available in someother language other than Java and you want a Java implementation. Or when when a new grid service is defined.
-- From GWSDL interface: Use GWSLD2WSDL tool to generate WSDL 1.1 portType, run generateBinding tool to generate wsdl:binding and wsdl:service parts for the portType definition; generateStubs for generating stubs.

c. Implement the service:
--See the Figure 2 Server Programming Model we discussed in the core white paper.
-- Two approaches: Inheritance approach and Operation provider approach.
--Inheritance extends GridServiceImpl but is tightly coupled with the implementations in the container.

-- Operation Provide approach makes it easy to plug in various implementations at deployment time.

-- OGSI defined implementations of NotificationSource and Factory have been implemented as OperationProviders in the framework. These can be readily configured into the service using deployment descriptors.

-- QName : Qulaified name: conatins namespace and a name as in wsdl.

-- * specifies all operations in a certain namespace

d. Deploy the service:

--write a deployment descriptor configuring your service

-- create a "gar" package of the configuration along with your implementation

-- deploy the gar package into a Grid service hosting env: from OGSA installation directory run the deploy command.

e. Writing a client
1. Get OGSiGridServiceLocator
2. Resolve GridServiceFactory
3. Resolve CounterServiceGridLocator
4. Make proxy/stub
5. Invoke operation on stub